

Application No.: 10/046,812Docket No.: 4481-044REMARKS

Claim 1 has been amended to ensure infringement at the time the circuit is sold, prior to being put into use. In addition, the claim has been amended so that it is in preferred United States form, whereby the characterizing clause has been omitted. In addition, claim 1 has been amended to include the feature of page 6, line 20, and page 7, line 12. In particular, claim 1 now requires the electric shield to entirely enclose the first track.

Claim 3 has been amended to overcome the objection set forth in item 1, page 2 of the office action. Claim 2 has been amended to ensure infringement at the time the goods are sold and claims 3 and 4 have been amended to ensure open ended coverage. Page 6 has been amended to cure some syntax problems.

Claims 10-12 have been added to provide applicant with the protection to which he is deemed entitled. Claim 10 is directed to preventing excessive current flow through the integrated circuit electrode. Newly added independent claim 10 also requires the shield to entirely enclose the portion of the track extending across the second circuit. Claim 11 is directed to details of the first and second circuits and indicates the shield is interposed between the track that extends over the second circuit and a trace of the second circuit. The shield prevents short circuiting between the trace and track and thereby prevents excessive current flow through the laser diode. New claim 12 includes a similar limitation, but does not specifically require the shield to entirely enclose the portion of the track extending across the second circuit.

Claim 1, as amended, distinguishes over the Ueno reference (JP 406069210A) by requiring the shield to entirely enclose the first track. In contrast, in the Ueno reference, shield 30 has a

Application No.: 10/046,812Docket No.: 4481-044

ladder-like configuration as discussed in the abstract and as clearly illustrated in Figure 3 of the reference. Applicant, by entirely enclosing the track with the shield, provides improved isolation between the track and the second circuit.

Claims 2-7 and 9, being dependent on claim 1, are allowable therewith. Claim 8 has been canceled to expedite prosecution.

New claim 10 distinguishes over the Ueno reference by requiring a shield that entirely encloses the portion of the track extending across the second circuit for preventing short circuiting of the track to the second circuit and thereby preventing excessive current flow through (a) the first terminal, (b) the first bonding pad and (c) the laser diode electrodes. The Ueno ladder structure does not include a shield that entirely encloses a portion of a track extending across a second circuit.

New claim 11, dependent upon claim 10, defines details of the first and second circuits, as illustrated and described in connection with Figure 6.

New independent claim 12 indicates the shield electrode is interposed between the track that extends across a portion of second circuit and is connected to a bonding pad and the first circuit. The first and second circuits are required to include at least one transistor connected to bonding pads for supplying current to the laser diode electrodes. The prior art of record fails to consider the problems associated with excessive current being drawn by a laser diode as a result of short circuiting between a track and a circuit including a transistor for driving the laser diode, wherein the track extends across the circuit. The combination of claim 12 is clearly not disclosed by the art of record.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance are respectfully requested and deemed in order.

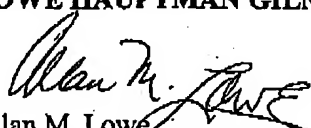
To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby

Application No.: 10/046,812Docket No.: 4481-044

made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN GILMAN & BERNER, LLP


Allan M. Lowe
Registration No. 19,641

Customer Number: 22429
1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314
(703) 684-1111
(703) 518-5499 Facsimile
Date: May 24, 2004
AML/pjc

CERTIFICATION OF FACSIMILE TRANSMISSION
I HEREBY CERTIFY THAT THIS PAPER IS BEING FACSIMI-
LE TRANSMITTED TO THE PATENT AND TRADEMARK OFFICE
ON THE DATE SHOWN BELOW
Pamela Cei
TYPE OR PRINT NAME OF PERSON SIGNING CERTIFICATION
[Signature] 5/24/04
SIGNATURE DATE
703.872.9300 10pp
FACSIMILE NUMBER